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Monthly Report

#997205

25X1

PAR 233

31 Mar 66

SUBJECT: Zoom (6X to 60X) Project Lens for Monochromatic Light

TASK/PROBLEM

1. Investigate the possibility of designing a 6X to 60X Zoom Projection Lens for Monochromatic Light.

DISCUSSION

2. Since the visit by the customer's representative on 28 Feb 66, our lens designers have found that the use of a "light flint" glass in place of the "dense flint" considered previously could increase the system transmittance to the order of 50% at 3650A. The possibility of using this glass is provided by attempting correction of the system for a narrower spectral range (3600A to 3700A) than previously considered.

3. On 22 Mar 66, a contractor's representative visited the customer's facility to review this project, among others. It was pointed out in that conference that the UV sensitive screen proposed for use with this lens is not an amplifying (image intensifier) screen; hence, the energy radiated from the screen as an image is supplied entirely by the projected energy upon the screen. In this case, the large f-number (small aperture) of the proposed zoom system as observed from the screen may produce an image too dim for photo-interpretation use, even with transmittance at 50%.

PLANNED ACTIVITY

4. No further work will be done on this project until we are instructed to do so by the customer.

Declass Review by NGA.

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GROUP 1
EXCLUDED FROM AUTOMATIC DOWNGRADING
AND DECLASSIFICATION